

ESD SHUNT FOR TRANSDUCING HEAD

ABSTRACT OF THE DISCLOSURE

A transducing head includes a sensor element having a plurality of terminal pads and a shunt electrically connected with the sensor element in parallel for protecting the sensor element from electrical damage during fabrication of the transducing head. The shunt includes one or more fuses, where the shunt configured to be repeatedly tested around during fabrication to allow testing of the sensor element. The shunt is structured to be permanently electrically removable prior to operation of the transducing head by directing a shunt removal current through the shunt which effectively creates an open circuit in the shunt without causing a damaging current to flow in the sensor element. In another embodiment, the transducing head includes a shunt electrically connected with the sensor element in parallel. The shunt includes a plurality of removable resistive elements, each resistive element having an element resistance, and an adjustable transducing head resistance defined by the sensor resistance and the element resistances. Sequential removal of some or all of the resistive elements establishes a desired transducing head resistance.